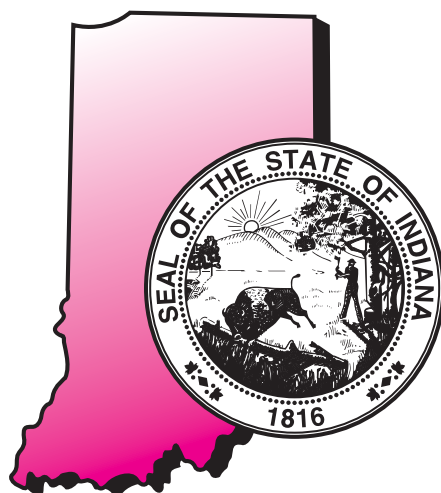


# ***ISTEP+* Fall 2008**

Indiana Statewide Testing for Educational Progress

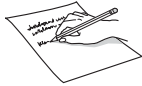
English/Language Arts • Mathematics  
**Grade 6**



Indiana Department of Education

Web Version

Use only a Number 2 pencil to respond to the questions in this book. Responses written in pen CANNOT be scored.



Whenever you see this icon, you will be doing a writing activity. Your writing will not be scored on your personal opinions or choices, but will be scored objectively on

- how clearly you address the prompt
- how well you organize your ideas
- how effectively you express yourself
- how consistently you use correct paragraphing, grammar, spelling, and punctuation

Be sure to use the rules of Standard English. Standard English is the English commonly used in formal writing. It does not include slang or jargon.

**Acknowledgments:** CTB is indebted to the following for permission to use material in this book.

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# Test 3: English/Language Arts

## Cell Phones at School

Read the writing prompt below and complete the writing activity.

Suppose your school principal wants your opinion about whether or not to allow cell phones at school. Do you think students having cell phones at school is a good idea or not? What might be some advantages? What might be some problems?

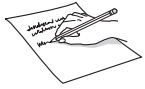
Write a persuasive essay in which you describe your opinion about having cell phones at school. Try to convince the school principal that your opinion is fair to everyone. Give specific details to support why you think cell phones should or should not be allowed at school.

Be sure to include

- your clearly stated opinion
- an explanation of why your opinion is fair to everyone
- any advantages cell phones might bring
- any problems cell phones might cause
- supporting details that will persuade the school principal to follow your advice
- an introduction, a body, and a conclusion to your persuasive essay

Go On





Use the Pre-Writing/Planning space or additional paper for notes, lists, webs, outlines, or anything else that might help you plan your writing. Then write your persuasive essay on the lined pages. Be sure to write neatly. Using the Editing Checklist on page 9, check your writing for correct paragraphing, grammar, spelling, punctuation, and the use of Standard English.

**NOTE:** Only your writing on the lined pages in this book will be scored.

## Pre-Writing/Planning

Go On



Pre-Writing/Planning



## Persuasive Essay

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# Test 3

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Page 9

# Test 4: English/Language Arts

For Test 4, you will read an article and a story. You will answer questions based on each passage. Then you will write a story on a related topic.

First you will read “Take a Walk on the Wild Side,” an article about two people who hike over a lava field on an active volcano in Hawaii. Read the article and do Numbers 1 through 7. You may look back at the article as often as you like.

Go On



Take a Walk on the

# Wild Side

by Donna Donovan-O'Meara



*What smells like a mixture of rotten eggs and tar and is hot enough to melt the soles of your sneakers?*

Kilauea [kee-lou-ey-ah] volcano on the island of Hawaii, of course. Imagine standing so close to a lava flow that you get a “lava sunburn.” Today we’re hiking Kilauea’s eastern rift zone<sup>1</sup> to collect a molten<sup>2</sup> sample, and you’re invited. So hold your nose, and let’s get going!

We load our gear into a van and snake down Chain of Craters road from Kilauea’s 4,000-foot summit to sea level. Glancing back, Kilauea looks like a giant, gray, hot fudge sundae stuck on the side of its larger, sister volcano, Mauna Loa. We drive along the coast until we can go no farther; the road is covered by newly hardened lava flows.

When yellow-orange, 1,500-degree-Fahrenheit lava is exposed to the cool air, it hardens and turns silver, then black. The surface of new lava is as fragile as an eggshell, and it cracks and crunches when you walk on it. But these fractured slivers cut like shattered glass, so we put on protective leather boots, thick gloves, and tough pants.

There are other dangers, too. Because it gets very hot while hiking, we each pack a half gallon of water. Volcanoes expel<sup>3</sup> toxic fumes, so we bring goggles and gas masks—just in case the wind suddenly shifts direction. In addition, we carry a bundle of long sticks and strips of a shredded white sheet. Every hundred feet, we push a stick into a crack and tie the light cloth to it. It’s easy to get lost in a lava field. And

<sup>1</sup>**rift zone:** a large area of the earth in which plates of the earth’s crust are moving away from each other

<sup>2</sup>**molten:** reduced to liquid form by heating

<sup>3</sup>**expel:** put out

Go On



this stick-path will help get us back the way we came, especially at night!

The terrain is unstable underfoot, so hiking is sluggish. We hobble through a barren, black-lava sea complete with craggy, billowing waves of stone and “bottomless” cracks and crevasses.<sup>4</sup> As though mocking us, steam hisses from ground vents.

After a mile, we encounter a super-hot area. An underground lava tube is directly beneath us. Fifty feet ahead, my husband Steve spots the air shimmering as it does on a hot highway in summer. We hear snapping, popping noises and see hot, glittering, red lava squeeze through the surface on which we are standing—like a tube of toothpaste with a hole in it. Pressure within Kilauea forces magma through weakened fractures, called fault lines. When it surfaces, we see it as meandering rivers of lava.

Steve jabs a creeping lobe of molten rock with a long steel rod. The viscous<sup>5</sup> lava feels heavy, like a big, wet towel knotted at the end of a broomstick. He thrusts the glob into a coffee can filled with cool water. The hot blob makes the water in the can sizzle and spit.

A lonely strand of lava crawls forward, drapes itself over a cliff, and splatters into the Pacific Ocean. Since we have our sample, our work is done. Now let’s watch what happens when lava enters the sea.

A huge, green wave smashes into the lava flow, creating a private fireworks display. Together, the icy sea and boiling lava make thunderous explosions. Ocean water shoots skyward as steam. Chunks of hissing spatter-bombs of lava fly back from the ocean’s force. The waves freeze the surface of the molten flow, forming a dark, gossamer<sup>6</sup> skin atop the red stream. More lava advances, and the scene is repeated over and over again. Finally, the waves win and chase the lava out of sight for good.

Dusk has arrived. Reluctantly, we pack our gear to leave. We had better start looking for the first trail marker that will lead us back through the lava field to where we started.

<sup>4</sup>**crevasses:** deep cracks

<sup>5</sup>**viscous:** sticky and thick

<sup>6</sup>**gossamer:** something extremely light, flimsy, or delicate



- 1 What is the MAIN reason the narrator and her husband are hiking at the Kilauea volcano?
- ☐ to collect a sample of hot lava
  - ☐ to watch the hot lava meet the sea
  - ☐ to make a trail across the lava flow
  - ☐ to see the shapes made by cooling lava

- 2 Read this sentence from the article.

**We load our gear into a van and snake down Chain of Craters road from Kilauea’s 4,000-foot summit to sea level.**

The phrase “snake down” suggests that Chain of Craters road

- ☐ has twists and turns
- ☐ has a rocky surface
- ☐ is covered with hot lava
- ☐ is too narrow for the van

3 Read this sentence from the article.

**We hobble through a barren, black-lava sea complete with craggy, billowing waves of stone and “bottomless” cracks and crevasses.**

The narrator MOST LIKELY compares the lava to a sea to help the reader understand

- ☐ what the lava smells like
- ☐ what the lava looks like
- ☐ how important the lava is
- ☐ how dangerous the lava is

4 Which sentence from the article includes an OPINION?

- ☐ “It’s easy to get lost in a lava field.”
- ☐ “An underground lava tube is directly beneath us.”
- ☐ “Since we have our sample, our work is done.”
- ☐ “Ocean water shoots skyward as steam.”

Go On



- 5** The article tells about some of the dangers of hiking at a volcano. In the chart below, list **TWO** different dangers that the narrator encounters at Kilauea, and tell how she protects herself from those dangers.

Dangers at Kilauea	Protection from dangers

- 6** In order to return to their van, the narrator and her husband will **MOST LIKELY**

- ☐ walk toward the top of the volcano
- ☐ use a detailed map to find the hiking trail
- ☐ follow the trail of sticks they made earlier
- ☐ climb a lava flow so they can see the road

7 Read this sentence from the article.

**A huge, green wave smashes into the lava flow, creating a private fireworks display.**

Provide TWO different details from the article that explain why the narrator compares what she sees to a fireworks display.

1) \_\_\_\_\_

\_\_\_\_\_

2) \_\_\_\_\_

\_\_\_\_\_

Go On





# English/Language Arts

You will now read “Eyes of the Dragon,” a story about a girl’s chance encounter with a dragon. After you read the story, you will answer some questions. Then you will write a story on a related topic.

Now read “Eyes of the Dragon” and do Numbers 8 through 13. You may look back at the story as often as you like.

# Eyes of the Dragon

By Camille S. Phillips

Illustrated by Laura Bryant

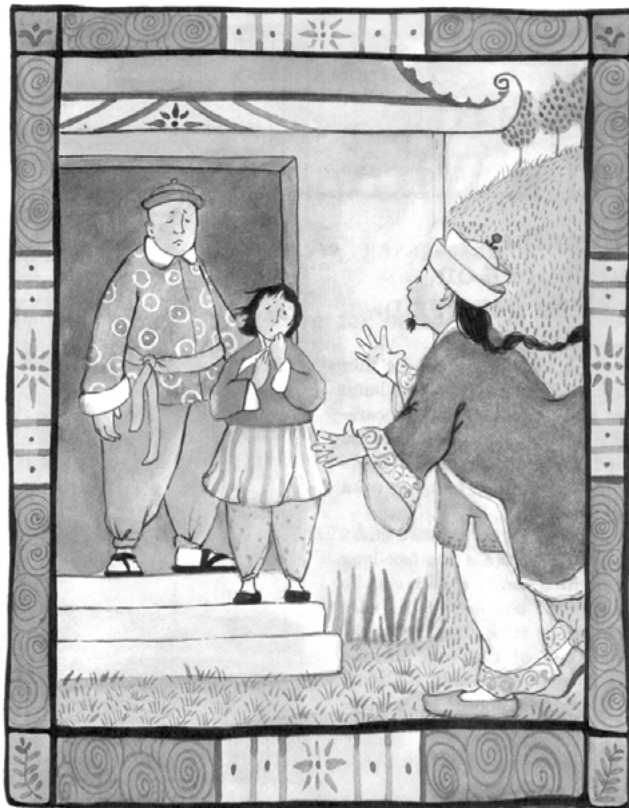
Long ago in China, a girl named Shang lived in a village near the emperor's palace. Her father, Lin, was a glassblower, and Shang helped him, even though her sight was poor. She brought water from the stream, cared for her father's tools, and reminded him to eat and sleep.

Shang thought that all of her father's glass sculptures were beautiful, but her favorites were the tiny dragons, the emblem of the emperor. Unfortunately, she could see them only by holding them close to her face.

Every month a servant of the emperor bought new treasures from Lin, and it was in this way that Shang and Lin made their living. But one day the servant said, "The emperor desires larger sculptures."

Lin and Shang bowed, but they knew that the fragile glass structures often collapsed when made larger. Until this point, the emperor had always prized the smallest sculptures above all others, and Lin's creations had satisfied his ruler's wishes.

The next month the servant rejected several pieces, saying, "These are too small." Shang shivered in fear. Her father was a wonderful artist but an impractical man. How would they earn a living if the emperor ceased to buy her father's crystal sculptures?



Go On



Shang fretted as she went to fetch water from the stream outside the village. There the cheerful singing of birds lightened her heart. She was so comforted by their music that she followed them farther and farther into the forest. Suddenly they fell silent.

Shang peered around, frowning. She didn't know where she was. She began to walk slowly, trying to find her way back to the village. The forest was very still.

At the edge of a clearing, Shang stumbled and fell. As she rose to her feet, she heard bushes rustling, and something large came toward her. It moved closer and closer, then it stopped. She squinted and saw the enormous head of a green dragon! Shang felt faint. But since she loved her father's glass dragons, she gathered her courage.

"Oh, mighty dragon," she said in a small voice, "I am sorry to have disturbed you. Please permit me to leave so that you can rest."

"Perhaps, little one," rumbled the dragon. "Why are you here?"

"I am lost," she said. "I followed the birds and didn't notice that I had strayed far from my village."

"You didn't notice my tail either. You tripped over it," he snapped.

"I am sorry, great one," said Shang. "I hope I did not bruise your tail."

"You are too small to hurt me, but I thank you for your apology," said the dragon. He smiled, revealing large teeth.

"Then, may I go?"

"Perhaps, if you help me with a small problem."

"How may I serve you?" she asked, feeling encouraged.

"Part of a sharp branch is embedded in my leg. I cannot remove it."

"I see poorly," said Shang, "but I will do what I can for you."

"I can help you with your sight. Take this scale of mine and hold it in front of your eye," the dragon instructed.

She did so. The green scale was translucent; peering through it, she was able to see clearly!

How splendid the world was—the trees, the clouds, and, most glorious of all, the dragon!



"You are magnificent! You are even more beautiful than my father's sculptures," Shang exclaimed, forgetting her fear.

The dragon arched his neck and preened. "Thank you. Now, help me." He showed her his leg.

After Shang removed the branch and cleaned the wound, the dragon bowed his head to her in thanks. "As a gift, I present you with another scale so that you may see the beauty of the world with both eyes." Then he rose into the sky.

Shang ran home and told her father what had happened. Lin was terrified for her, and then relieved. As he examined the dragon's scales, he said, "These remind me of my glass, yet they enable you to see."

The next day the emperor's servant arrived. Again he bought fewer of the sculptures. After he left, Shang said, "Father, what if the emperor wants larger sculptures because his sight is failing? Could we make him pieces of glass like my dragon scales?"

"An interesting thought," her father said. "Let us try." They worked for several weeks to create glass like the dragon's scales. Shang held up each type of glass in front of her eyes. When she could see clearly through it, they knew they had succeeded. Lin used silver to create a handle for two pieces of the glass.

When the emperor's servant came again, Lin gave the silver-mounted glass pieces to him. "My daughter presents this gift to the emperor. They are called 'eyes of the dragon.' Ask the emperor to hold the glass pieces in front of his eyes," said Lin.

Two days later the servant returned. "The emperor is most pleased," he said. "He desires more of his favorite sculptures, the small ones."

From that day forward, Shang and Lin lived in great prosperity. The emperor gave them many honors, including an estate. And he commanded them to teach their craft to others so that everyone in the kingdom could receive the gift of sight called "eyes of the dragon."



8 Shang and the dragon are ALIKE in that both are

- ☐ cheerful
- ☐ helpful
- ☐ lonely
- ☐ shy

9 Besides giving the dragon the ability to speak, what are TWO OTHER ways the author makes the dragon seem more like a human than like a monster?

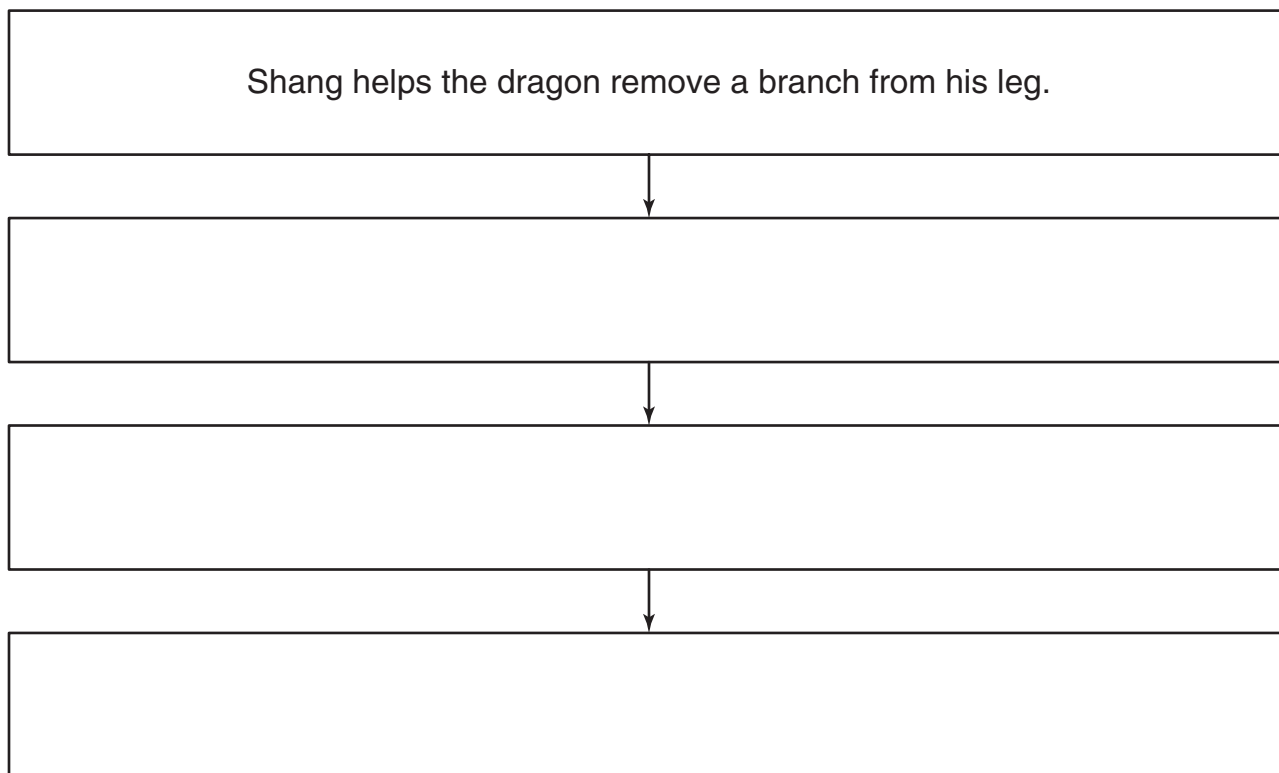
- 1) \_\_\_\_\_  
\_\_\_\_\_
- 2) \_\_\_\_\_  
\_\_\_\_\_



**10** Why is Shang's trip to the stream to fetch water important to the development of the plot of this story?

- ☐ It leads her to make her own glass sculptures.
- ☐ It leads her into the forest to meet the dragon.
- ☐ It teaches her to make friends with the forest animals.
- ☐ It shows her father that she wants to help him earn a living.

**11** In "Eyes of the Dragon," the spirit of kindness spreads from one character to another. In the chart below, fill in the boxes with **THREE** different events from the story that show how kindness spreads from one to another.



Go On



12 Read this sentence from the story.

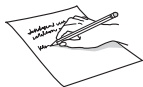
**There the cheerful singing of birds lightened her heart.**

The author uses the phrase “lightened her heart” to show that

- ☐ Shang was singing along with the birds
- ☐ the birds made Shang feel less worried
- ☐ Shang had met the birds many times before
- ☐ the birds wanted to lead Shang away from the village



13



Imagine that Shang and the dragon meet again one year AFTER this story takes place. How is Shang the same? How is she different?

Write a story that begins one year after “Eyes of the Dragon” ends. In your story, imagine that Shang and the dragon meet again. Tell what happens next, and show how Shang’s life is the same and how it has changed. **In your story, be sure to include at least ONE detail from “Eyes of the Dragon” to show how Shang is the same and ONE detail to show how she is different.**

You may use the space below to plan your writing. Using the Editing Checklist on page 26, check your writing for correct paragraphing, grammar, spelling, punctuation, and the use of Standard English. **Remember, your story should be well organized and have a introduction, a body, and a conclusion.**

**NOTE:** Only your writing on the lined pages in this book will be scored.

### Pre-Writing/Planning

Go On



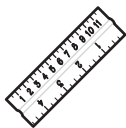


Story

Handwriting practice lines for the story section.



Use only a Number 2 pencil to respond to the questions in this book. Responses written in pen CANNOT be scored.



If you see this symbol, use your ruler as a straightedge or to solve the problem.



If you see this symbol, use your protractor to solve the problem.

# Test 7: Mathematics

Since you may receive partial credit for many of the problems, it is important to show ALL work in the spaces provided in this book. When you see the words **Show All Work**, be sure to

- show all the steps needed to solve the problem
- make your handwriting clear and easy to read
- write the answer on the answer line

**1** Read the following phrase.

three more than twice  $n$

On the line below, write an expression to represent the phrase.

Expression \_\_\_\_\_

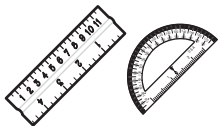
On the line below, evaluate the expression you wrote when  $n = 31$ .

Answer \_\_\_\_\_

Go On

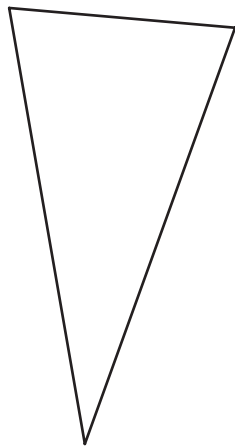


2



Use your ruler and protractor to help solve this problem.

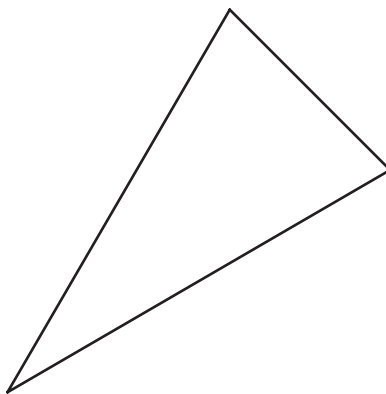
Two of the triangles below are congruent.



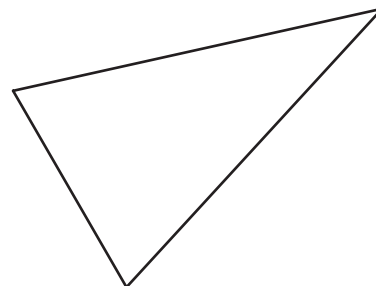
A



B



C



D

On the line below, name the two congruent triangles.

Answer \_\_\_\_\_

On the lines below, explain how you used your ruler and your protractor to prove the two triangles you named are congruent.

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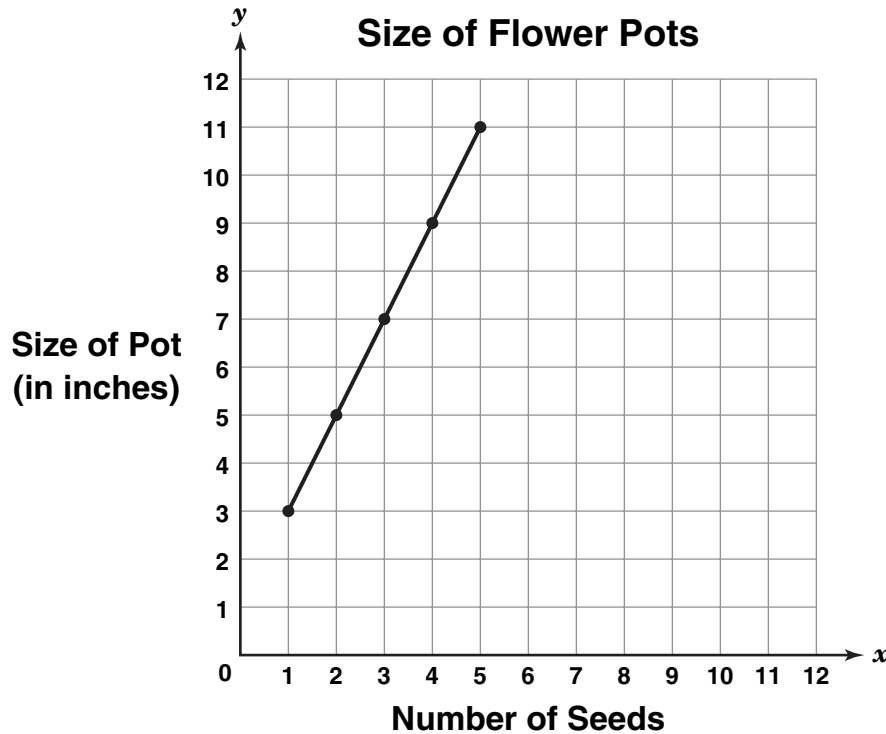
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- 3 Ellie is planting different numbers of seeds in flower pots. The graph below shows the size, in inches, of each pot,  $y$ , Ellie uses to plant  $x$  seeds.



According to the graph, what is the size, in inches, of the flower pot Ellie uses to plant 4 seeds?

Answer \_\_\_\_\_ inches

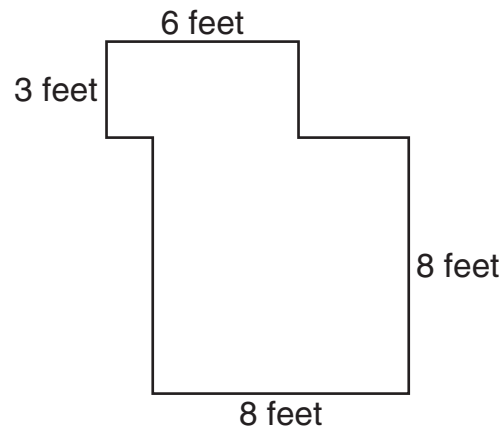
What is the difference, in inches, of the size of the flower pot Ellie uses to plant 4 seeds compared to the flower pot that Ellie uses to plant 2 seeds?

Answer \_\_\_\_\_ inches

Go On



- 4 Chelsea built a sandbox. The sandbox consists of 2 rectangles, as shown in the figure below.



What is the area, in square feet, of the sandbox?

$$\begin{aligned} \text{Area of rectangle} &= lw \\ &= \text{length} \times \text{width} \end{aligned}$$

**Show All Work**

**Answer** \_\_\_\_\_ square feet



- 5 An ice-cream parlor is giving away 2 free scoops of ice cream to each adult and 1 free scoop of ice cream to each child during a one-hour event. The ice-cream parlor collected the data shown in the table below during the event.

Ice-Cream Event

Time	Number of Adults	Number of Children
9:00 A.M.–9:15 A.M.	9	11
9:16 A.M.–9:30 A.M.	6	8
9:31 A.M.–9:45 A.M.	11	13
9:46 A.M.–10:00 A.M.	13	15

Use the expression  $2a + 1c$ , where  $a$  represents the number of adults and  $c$  represents the number of children that took part in the event, to find the number of free scoops given away from 9:16 A.M. until 9:30 A.M.

Show All Work

Answer \_\_\_\_\_ scoops

Go On





If each free scoop of ice cream weighed 4 ounces, how many POUNDS of ice cream were given away from 9:16 A.M. to 9:30 A.M.?

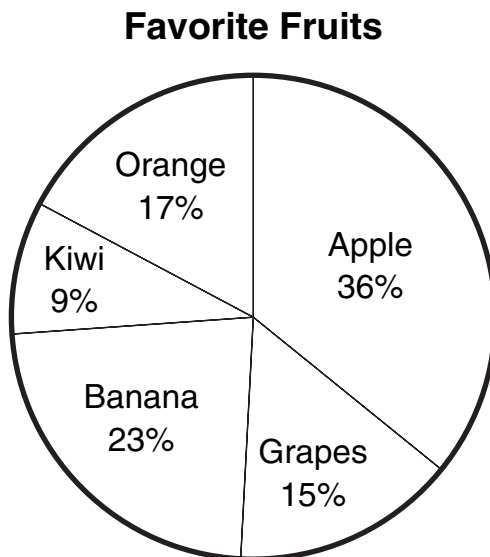
16 ounces = 1 pound

Show All Work

Answer \_\_\_\_\_ pounds



- 6 Greg conducted a survey of 100 classmates to determine their favorite fruits. The results of the survey are shown in the circle graph below.



Which two fruits represent  $\frac{2}{5}$  of the students' favorites?

**Show All Work**

**Answer** \_\_\_\_\_ and \_\_\_\_\_

Go On



- 7 Matthew's dad buys a cup of coffee every Friday morning and gives Matthew his change. This month, Matthew received \$0.15, \$0.01, \$0.30, and \$0.22.

Place these numbers in numerical order from least to greatest.

Answer \_\_\_\_\_

What is the total amount of money that Matthew received this month?

Show All Work

Answer \$ \_\_\_\_\_

# Test 8: Mathematics

Since you may receive partial credit for many of the problems, it is important to show ALL work in the spaces provided in this book. When you see the words **Show All Work**, be sure to

- show all the steps needed to solve the problem
- make your handwriting clear and easy to read
- write the answer on the answer line

- 1 Katie sold 12 tickets to a school play. Katie's total sales,  $t$ , for the tickets is given by the formula

$$12 \times c = t$$

where  $c$  is the cost per ticket.

What were Katie's total sales if the cost of each ticket is \$5?

**Show All Work**

Answer \$ \_\_\_\_\_

Go On



- 2** Cole has \$9.16 and is given \$2.25 more. Steven has \$13.64 and spends \$2.28 at the store.

Compare the amount of money Cole and Steven now have by using the symbol for less than ( $<$ ), equals ( $=$ ), or greater than ( $>$ ).

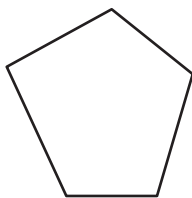
**Show All Work**

**Answer** \$ \_\_\_\_\_ \$ \_\_\_\_\_

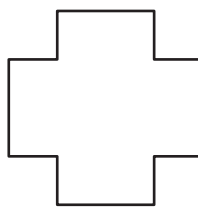
- 3** Look at the shapes below.



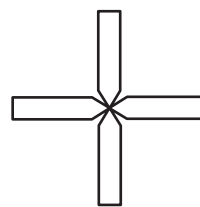
**A**



**B**



**C**



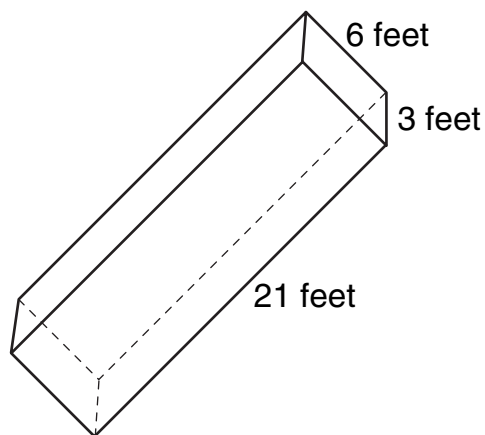
**D**

On the line below, list all the shapes that have BOTH reflectional and rotational symmetry.

**Answer** \_\_\_\_\_



- 4 What is the volume, in cubic feet, of the rectangular prism shown below?



$$\begin{aligned}\text{Volume of rectangular prism} &= lwh \\ &= \text{length} \times \text{width} \times \text{height}\end{aligned}$$

**Show All Work**

**Answer** \_\_\_\_\_ cubic feet

**Go On**



- 5 An arena has 990 seats. There are 78 events scheduled at the arena this year. Bert used the following calculation to estimate the number of tickets the arena will sell this year if every event is sold out.

$$900 \times 70 = 63,000$$

On the lines below, identify whether Bert's estimate is reasonable and explain how you determined your answer.

---

---

---

---

What is the ACTUAL number of tickets that will be sold this year if every event is sold out?

**Show All Work**

**Answer** \_\_\_\_\_ tickets

Go On



- 6 The winner of Ms. West's class spelling bee is allowed to choose one gumball from a jar. The number of each color of gumball in the jar is shown in the table below.

Gumball Jar

Color	Number in Jar
Red	
White	
Green	
Pink	

What is the probability that the winner will randomly choose a red gumball?

Show All Work

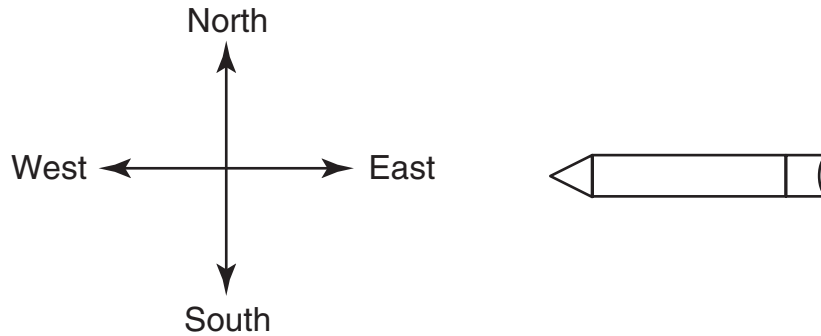
Answer \_\_\_\_\_

Go On





- 7 The point of the pencil shown in the diagram below is pointing west.



What direction will the point of the pencil be facing if it is rotated a  $\frac{1}{2}$  turn?

Answer \_\_\_\_\_

How many degrees are in a  $\frac{1}{2}$  turn?

Answer \_\_\_\_\_°



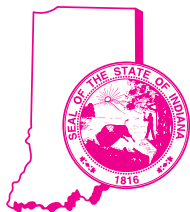
**ATTENTION!** Please do not leave your punchouts in this book.

STOP! — STOP! — STOP! — STOP! — STOP! —



# Response Book for Grade 6

## English/Language Arts • Mathematics



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